

**KANSAS DEPARTMENT OF TRANSPORTATION  
 SPECIAL PROVISION TO THE  
 STANDARD SPECIFICATIONS, EDITION 2007**

**Add a new SECTION in DIVISION 800:**

**PAVEMENT WATERPROOFING MEMBRANE**

**1.0 DESCRIPTION**

Install the pavement waterproofing membrane at the locations designated in the Contract Documents. This product is primarily used over localized pavement failures, over joints and cracks, and on bridge decks before an overlay.

**BID ITEM**

Pavement Waterproofing Membrane  
 Pavement Waterproofing Membrane (\*)  
 \* width

**UNITS**

Square Yard  
 Linear Foot

**2.0 MATERIALS**

Provide an asphalt saturated paving fabric coated with a rubberized asphalt adhesive complying with **TABLE 1**.

<b>TABLE 1: HIGH STRENGTH GEOTEXTILE PROPERTIES</b>		
<b>Properties</b>	<b>Minimum Average Roll Value (MARV)</b>	<b>Method of Test</b>
Permeance-Perms	0.10 perms (max)	ASTM E 96 Method B
Pliability (180° bend on a 1/4" mandrel @ -25°F)	No cracking in fabric or rubber	ASTM D 146
Puncture Resistance	200 lbs	ASTM E 154
Tensile Strength	50 lbs/in	ASTM D 882

The Engineer will accept the pavement waterproofing membrane upon the receipt and approval of Type D certification as specified in **DIVISION 2600**, and visual inspection for condition at the point of usage.

If required, provide a material for a prime coat (comprised of refined asphalt and a rapidly drying solvent) that complies with **DIVISION 1200**.

When the unit of measure is square yards, the minimum width of material is 36 inches. When the unit of measure is linear foot, the width of material is that specified in the Contract Documents.

**3.0 CONSTRUCTION REQUIREMENTS**

Provide the Project Engineer with a copy of the fabric manufacturer's recommendations for installation.

Before placing the pavement waterproofing membrane, clean the existing pavement or bridge deck of any dirt, debris or deteriorating pavement materials, according to the manufacturer's recommendations. Clean milled surfaces with compressed air to remove all dust and files.

Before placing the pavement waterproofing membrane on existing pavement, fill all holes and cracks wider than 1/2 inch in the existing pavement with approved crack filler. Remove and fill spalled areas greater than 3 inches in width with hot/cold-mix asphalt or a suitable crack filler.

Before placing the pavement waterproofing membrane on an existing bridge deck, if necessary, place concrete patches on the existing bridge deck according to the details in the Contract Documents.

Do not place the pavement waterproofing membrane unless the ambient and pavement temperatures are at least 50°F and rising. The pavement surface or bridge deck must be dry prior to installation.

Apply a prime coat (at the rate recommended by the manufacturer of the fabric) when recommended by the fabric manufacturer. In addition, apply a prime coat on the existing pavement if the surface has been milled, if the dry pavement temperature is below 70°F, or if the application is on a bridge deck.

Place the pavement waterproofing membrane according to the manufacturer's recommendations.

Overlap the pavement waterproofing membrane joints as recommended by the fabric manufacturer.

When possible, construct the succeeding overlay as soon as recommended by the manufacturer, without allowing any traffic on the membrane.

When the succeeding overlay can not be immediately placed, open the roadway to traffic as recommended by the manufacturer. Construct the succeeding overlay within 10 calendar days of placing the pavement waterproofing membrane. On slopes greater than 5%, construct the overlay within 48 hours.

Remove and replace all pavement waterproofing membrane that is damaged before it is covered with the overlay.

#### **4.0 MEASUREMENT AND PAYMENT**

When the unit of measure specified in the Contract Documents is linear foot, the Engineer will measure each individual strip of pavement waterproofing membrane placed by the linear foot.

When the unit of measure specified in the Contract Documents is square yard, the Engineer will measure the pavement waterproofing membrane by the square yard.

Payment for "Pavement Waterproofing Membrane" at the contract unit price is full compensation for the specified work.

11-23-10 C&M (LAL)

Apr-11 Letting